



**SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN**  
**(Autonomous)**

**Department of Electronics & Communication Engineering**

Vishnupur, Bhimavaram – 534202

**Digital Signal Processing Laboratory**

**Laboratory-in-Charge** : Dr. N.Prasad, Mr. M. V. Subba Rao

**Laboratory-Technician** : Mr. P. Narasimha Rao

**Objective:**

The laboratory is equipped with Texas manufactured DSP starter kits with the core processor TMS320C6713. Many of the algorithms and filter designing related to DSP are implemented in MATLAB software, Code Composer Studio ( Full Version) and using TMS320C6713 DSP processor.

By the end of this course, students should be able to:

1. Demonstrate basic knowledge of Digital Signal Processing by understanding various transformations.
2. Understand Various Discrete-time sequences and class of LTI Systems will be studied using the convolution sum, DFT, FFT and Spectral analysis of signals.
3. Quickly choose and design digital filters.
4. Analyze and describe the functionality of a real world DSP system
5. Apply DSP system design to real world applications

**Lab Equipment:**

S.No.	Item Description	Qty
1	DSP Trainer Kits (TMS 320C6713 DSK 16 MEG SDRAM) WITH CCS	5
2	DSP Trainer Kits,VSK-6713, Multi Media Speakers	5
3	DSP Trainer Kits,VSK-5416	5
4	DSP Trainer kits, VSK-6713	4
5	DSP Starter Kit (DSK) TMS320C6416 WITH Code Composer Studio-1	
6	DSP Starter kit (DSK) TMS 320c6416+Image/ Video Interfacing Card +Image Video Daughter Card with on Board Display With Code Composer Studio-1	
	Application Development Kit TMS320C6455 Starter Kit (DSK) For Medical Imaging-2	
	Heterogeneous Platform For Image & Video Application xtremes DSP KIT-1	
	Bloom With DSP Tutor Bloom With DSP Two MATLAB/SIMULINK /II-DSP V2.0 9 - 2(USERS)	

7	Digital Funds Camera (BOACH)	1
8	TI- Analog Kit(ALSK)	6
9	Gain Measuring Instruments (1. Digital Storage Oscilloscope,2. Dc Power Supply 30v, 5Amps, 3. Digital Multimeter 5& 1/2 Digit, 4. Electronic Instrumentation Trainer Kit)	1
10	<b>MATLAB Software 7.3 Version -25 Users</b> (Neural network, control systems, Fuzzy logic, Signal Processing, Communication, Filter design, Wavelet, RF Tool, Link for code composer studio, Image processing, Simlink , Simpower systems, Embedded Target, Real time Workshop, Signal Processing block set tool boxes for 1 users))	1
11	Computers: (Intel Pentium Duo Core E2140 Processor 160GHZ, 15" TFT Monitor)	33
12	Computers: (Intel Pentium Duo Core E2140 Processor 160GHZ, 15" TFT Monitor)	3
13	Computers: (HP PRO 3090 MT Desktop, Intel Pentium Dual Core F5500,2.86GHZ Processor, 18.5 wide Monitor)	10
14	Computer Monitors: HP PRO 3330 18.5 Inches Desk Top	6
15	Analog Discovery Kits	19
16	Digital Multimeter	1
17	HP SJ 4850 Scanner (230 - 12v Convertor adaptor, USB card, Software CD)	1
18	HP Laser Jet 1020 Printer	1
19	HP Laser Jet 1022 Printer	1
20	CRO 30 MHz	3
21	3 M Hz Function Generator	5
22	11 KVA UPS With 20 Batteries	1
23	LCD Projector (SANYO PLCXD220)	1
24	P A System	1
25	HUB Rack 4U	1
26	24 PORT Ethernet Switch	3
27	Jack Panel	3